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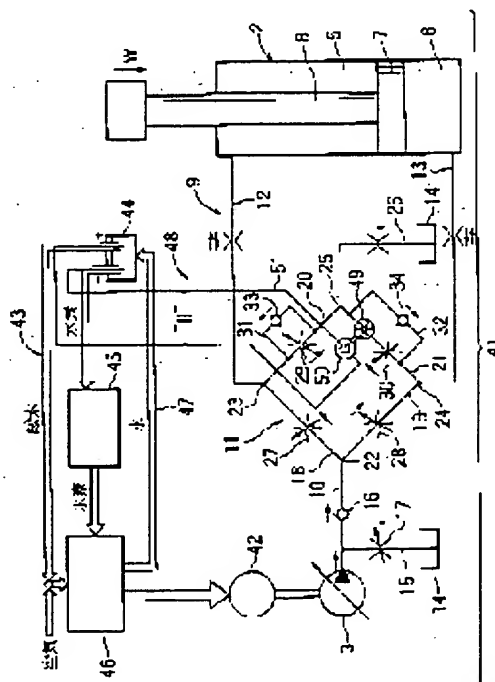
(54) ENERGY REGENERATIVE APPARATUS FOR CONSTRUCTION EQUIPMENT

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an energy regenerative apparatus that can enhance energy efficiency without harming environment.

**SOLUTION:** In construction equipment that works by expanding a hydraulic cylinder 2 by introducing a pressurized fluid from a hydraulic pump 3, this energy regenerative apparatus 41 regenerates the energy of the pressurized fluid introduced into the cylinder 2. The energy regenerative apparatus 41 has an electric motor 42, a fuel cell 46, and a regenerative electric power generation means 48. The electric motor 42 drives a hydraulic pump 3 as a power source. The fuel cell 46 supplies the electric power to the electric motor. The electric power generation means 48 generates electric

power by the energy of a discharged fluid in the fluid circuit discharged from the cylinder 2 when the cylinder 2 is contracted. The electric power, generated by the generation means 48, electrolyzes water in an electrolysis tank 4 and then generates oxygen and hydrogen. Therefore, the generated oxygen and hydrogen can be used in the fuel cell 46.



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